

WHAT IS CLAIMED IS:

1. An electro-optical panel, comprising:
 - a plurality of data lines;
 - a plurality of scanning lines; and
 - pixels provided in association with intersections of the data lines and the scanning lines, the pixels each including:
 - a hold capacitor that holds an electric charge;
 - an inverting device that outputs an output signal obtained by inverting an input signal;
 - a first switching element provided between the corresponding one of the data lines and the hold capacitor;
 - a second switching element provided between the hold capacitor and an input of the inverting device;
 - a third switching element provided between the hold capacitor and an output of the inverting device; and
 - an organic light-emitting diode element coupled to the output of the inverting device.
2. An electro-optical panel, comprising:
 - a plurality of data lines;
 - a plurality of scanning lines; and
 - pixels provided in association with intersections of the data lines and the scanning lines, the pixels each including:
 - an organic light-emitting diode;
 - a hold capacitor that holds an electric charge;
 - an inverting device that outputs an output signal obtained by inverting an input signal;
 - a first switching element provided between the corresponding one of the data lines and the hold capacitor;
 - a second switching element provided between the hold capacitor and an input of the inverting device;
 - a third switching element provided between the hold capacitor and an output of the inverting device; and
 - a fourth switching element provided between the output of the inverting device and the organic light-emitting diode.

3. A driving circuit for driving an electro-optical panel, having a plurality of data lines, a plurality of scanning lines, and pixels provided in association with intersections of the data lines and the scanning lines, the pixels each including:

an organic light-emitting diode;

an electric charge holding device that holds an electric charge;

an inverting device that outputs an output signal obtained by inverting an input signal;

a switching device that switches a connection state of the electric charge holding device and the inverting device, output of the inverting device being supplied to the organic light-emitting diode,

the driving circuit further comprising:

a control device that controls the switching device such that the electric charge holding device is coupled to an input of the inverting device and that the electric charge holding device is not coupled to an output of the inverting device at a holding period and that controls the switching device such that the electric charge holding device is coupled to the output of the inverting device an even number of times at a reading period.

4. A driving circuit for driving an electro-optical panel according to Claim 3, the electro-optical panel further including first switching elements each provided between each of the data lines and the electric charge holding device,

the switching device including a second switching element provided between an output of the electric charge holding device and the input of the inverting device and a third switching element provided between the output of the inverting device and the electric charge holding device, and

wherein, in a case where a first state represents a state in which the second switching element is turned off and the third switching element is turned on and a second state represents a state in which the second switching element is turned on and the third switching element is turned off, the control device controls the second switching element and the third switching element to the second state at the holding period and controls the second switching element and the third switching element to perform one cycle operation for changing from the first state to the second state and then changing back to the first state once or more at the reading period.

5. The driving circuit for driving an electro-optical panel according to Claim 4, the control device controlling the second switching element and the third switching element such that the transition between the first state and the second state is performed via a third

state that represents a state in which the second switching element and the third switching element are turned off.

6. The driving circuit for driving an electro-optical panel according to Claim 4, the electro-optical panel further including fourth switching elements each provided between the output of the inverting device and the organic light-emitting diode, and

the control device controls the fourth switching elements to an off state during the time at least from the start of the first state to the end of the one cycle operation at the reading period.

7. The driving circuit for driving an electro-optical panel according to Claim 3, the inverting device being operated by a high potential source and a low potential source, and

the electro-optical panel further including power supply device that supplies a first high potential, as a high potential source, and a first low potential, as a low potential source, to the inverting device at a holding period and that supplies a second high potential that is higher than the first high potential, as the high potential source, and a second low potential that is lower than the first low potential, as the low potential source, to the inverting device at the reading period.

8. The driving circuit for driving an electro-optical panel according to Claim 3, the inverting device including a P-channel thin film transistor and an N-channel thin film transistor, and

the first to third switching elements being thin film transistors.

9. An electronic apparatus, comprising:

an electro-optical panel including a plurality of data lines, a plurality of scanning lines, and pixels provided in association with intersections of the data lines and the scanning lines, the pixels each including an organic light-emitting diode; and

the driving circuit that drives the electro-optical panel as set forth in Claim 2.

10. A driving method for driving an electro-optical panel including a plurality of data lines, a plurality of scanning lines, and pixels provided in association with intersections of the data lines and the scanning lines, the pixels each including an organic light-emitting diode, an electric charge holding device that holds an electric charge, an inverting device that outputs an output signal obtained by inverting an input signal, and a switching device that switches a connection state of the electric charge holding device and the inverting device, output of the inverting device being supplied to the organic light-emitting diode, the driving method comprising:

controlling the switching device such that the electric charge holding device is coupled to an input of the inverting device and the electric charge holding device is not coupled to an output of the inverting device at a holding period; and

controlling the switching device such that the electric charge holding device is coupled to the output of the inverting device an even number of times at a reading period.

11. The driving method for driving an electro-optical panel according to Claim 10, the electro-optical panel further including first switching elements each provided between each of the data lines and the electric charge holding device, the switching device including a second switching element provided between the output of the electric charge holding device and the input of the inverting device and a third switching element provided between the output of the inverting device and the electric charge holding device, the driving method further comprising:

controlling the second switching element and the third switching element to a second state at the holding period; and

controlling the second switching element and the third switching element to perform one cycle operation for changing from a first state to the second state and then changing back to the first state once or more at the reading period, the first state representing a state in which the second switching element is turned off and the third switching element is turned on and the second state representing a state in which the second switching element is turned on and the third switching element is turned off.

12. A driving method for driving an electro-optical panel according to Claim 11, the driving method further comprising controlling the second switching element and the third switching element such that the transition between the first state and the second state is performed via a third state that represents a state in which the second switching element and the third switching element are turned off.

13. A driving method for driving an electro-optical panel according to Claim 11, the electro-optical panel further including fourth switching elements each provided between the output of the inverting device and the organic light-emitting diode, the driving method further comprising controlling the fourth switching elements to be turned off during the time at least from a start of the first state to an end of the one cycle operation at the reading period.

14. A driving method for driving an electro-optical panel according to Claim 11, the inverting device being operated by a high potential source and a low potential source, the driving method further comprising:

supplying a first high potential, as a high potential source, and a first low potential, as a low potential source, to the inverting device at the holding period; and

supplying a second high potential that is higher than the first high potential, as the high potential source, and a second low potential that is lower than the first low potential, as the low potential source, to the inverting device at the reading period.